

Rotameters and Ozone Generation for Water Treatment

Industry: Ozone Generation for Water Treatment
Product: Rotameter Flow Meters

Introduction

For nearly 100 years, ozone has been used all over the world for water sanitation. It is nature's strongest oxidizer and has a byproduct of pure oxygen. Chlorine, on the other hand, is a very effective, time-proven chemical, but is ineffective against hard-to-kill microorganisms such as cryptosporidium; it also has some unpleasant byproducts. Ozone is recognized among the strongest, fastest, commercially-available disinfectants and oxidants for water treatment. Ozone is used in both the disinfection of drinking water and bacterial killer in waste water treatment. Ozone is used in a large percentage of Municipal water treatment facilities as well as Pharmaceutical companies where pure water is essential.

Application

A large Municipality having both a water purification system and a waste treatment facility, decided to upgrade to an Ozone generation system to remove bacterial pathogens from both water streams. Customer needed a price competitive means of monitoring both locally and through a control system to insure the proper flow of Ozone was being injected to meet EPA standards.

Solution

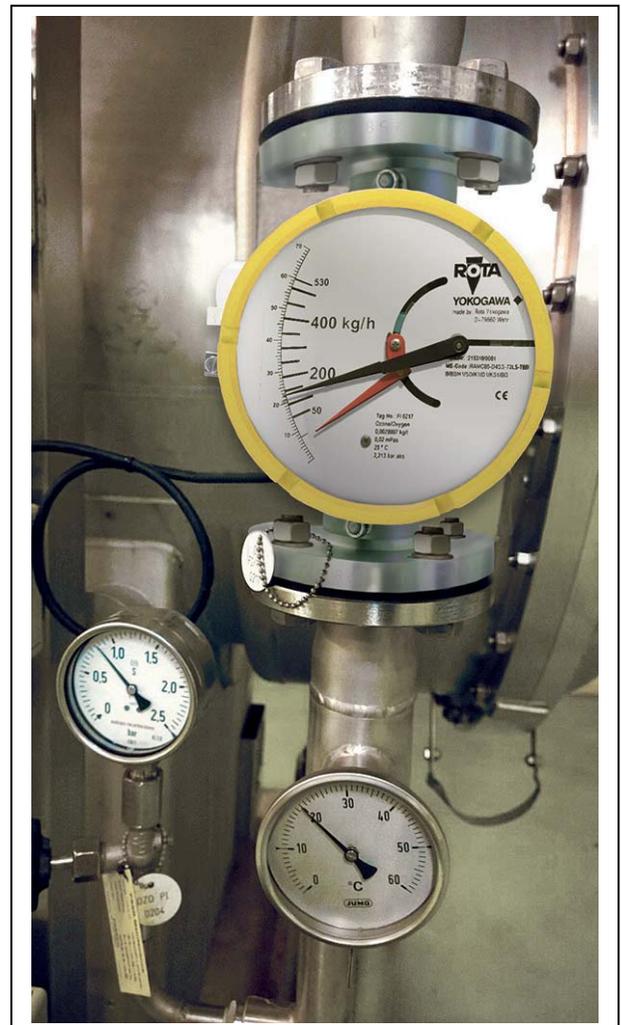
Because of their price competitiveness, large bold display and the optional 4-20 ma transmitter option with limit switches, Yokogawa's RAMC Rotameter were chosen to be the solution to this customer's needs. When a problem occurs that reduces the Ozone flow below the needed amount the RAMC limit switch would activate an alarm. Crews would then go and correct the situation and use the local indication to verify their corrective actions worked.

Water Treatment Facilities

To assist you in locating these water treatment opportunities in your area, below are links that list all the water treatment plants in the United States.

<http://www.aham.org/ht/a/GetDocumentAction/i/51820>

<http://www.environmental-expert.com/companies/keyword-industrial-water-treatment-7040/page-2>



Featured Products

RAMC

- Durable and reliable flowmeter
- Ranges in size from ½" to 6 inches
- Connections are NPT or Flanged
- FM/CS Intrinsically Safe
- ATEX Intrinsically Safe and ATEX exploding proof
- Used in all industries from Power Generation to pharmaceuticals
- Easy to install with low maintenance
- 4-20 ma and pulse output
- LCD Display
- Totalizer
- Can be used on Liquids or Gases
- Local indicator without additional power supply
- Cost effective



RAGL / RAGK

- Glass Rotameter
- Ranges in sizes 75mm, 150mm, 300mm
- Optional needle valve
- Optional flow regulator
- Available with Limit switches
- Used for tank level applications
- Made from Stainless Steel or PVC
- Sealed with no pressure on the Glass tube preventing cracking and breaking.
- Direct measurement and indication
- No external power needed
- Suited for gases and liquids
- Precise measurement at very low flow ranges
- Well proven instrument
- Quick and uncomplicated handling
- Very cost effective

